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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,492	04/13/2004	Clint Dee Winton Brooks	IFF-72	4948
48/060	7590	11/13/2008		
INTERNATIONAL FLAVORS & FRAGRANCES INC. 521 WEST 57TH ST NEW YORK, NY 10019			EXAMINER CHANNAVAJJALA, LAKSHMI SARADA	
			ART UNIT	PAPER NUMBER
			1611	
			MAIL DATE	DELIVERY MODE
			11/13/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/823,492

**Applicant(s)**

WINTON BROOKS ET AL.

**Examiner**

Lakshmi S. Channavajjala

**Art Unit**

1611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Receipt of amendment, response, terminal disclaimers and declaration under 37 CFR

1.130, all filed on 7-24-08 is acknowledged.

Claims 1 and 2 have been canceled. Claims 3-25 are pending.

#### ***Terminal Disclaimer***

1. The terminal disclaimers does not comply with 37 CFR 1.321(b) and/or (c) because:

The disclaimer fee in accordance with 37 CFR 1.20(d) has not been submitted, nor is there any authorization in the application file to charge a specified Deposit Account or credit card.

Accordingly, the double patenting rejections of record have been maintained.

#### ***Response to Arguments***

2. In response to the cancellation of claims 1 and 2 & in response to the common ownership statement provided, the following rejections have been withdrawn:

Claims 1-2, 4-7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,112,688 to Michael.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being obvious over each of the US Patents 7119057; 7122512; 7125835 and 7294612 and application 10/416610 in view of Midha (see above).

#### ***Claim Rejections - 35 USC § 103***

3. Claims 3-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,112,688 (Michael) in view of US 6,024,943 to Ness and US Pub. No. 2004/0005285 to Midha OR Michael in view of Midha
4. Claims 3-13 and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,024,943 to Ness in view of US 5112,688 to Michael and Midha.

Michael (also discussed in the instant specification on page 4, last paragraph) teaches liquid encapsulated microcapsules, wherein the capsule have a diameter between 50 and 35 microns and a wall thickness between 2 and 50 microns (abstract and claim 1 of Michael). The diameter and thickness values of the microcapsules taught by Michael fall within the ranges recited in claims 1-2, 4-5 The central core of the microcapsules is a hydrophobic liquid material that includes a perfume material and Michael teaches that the perfume material may be both that are highly water soluble and those that are more hydrophobic (col. 4, L 10-38). With respect to the claimed Clog P value, Michael teaches perfume materials that are also listed in the instant specification (see for instance, table III on pages 25-26), such as jasnone, d-limonene etc (col. 16, L 30 67) and therefore inherently possess the claimed Clog P values of 1.5 to 8.0. With respect to the ClogP of claim 6 (of the hydrophobic solvent), examiner notes that instant specification on page 11 (first paragraph) states that suitable the hydrophobic solvents with ClogP > than 8.0 include among other oils such as silicone oil (of claim 7). In this regard, the composition containing perfume filled microcapsules of Michael further contains polydimethyl siloxane and silicone DC (Example table 2). With respect to claim 10, instant claim is directed to a product and the process steps

described in the claimed do not carry patentable weight "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Further, while Michael teaches a fabric softener unlike the instant composition claims, the limitation human epidermal and/or hair treatment recited in the preamble, which is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Michael, discussed above, fails to teach the claimed polymer that makes up the wall of the microcapsule, cationically charged polymer of claim 9, the intensity of fragrance of claim 18 and application of the microcapsules to hair.

Ness teaches solid as well as porous microparticles containing perfume in the form of liquids absorbed within the particles for controlled release of the perfume, for retarded evaporation of deposited liquid and enhances the extent to which the liquid survives subsequent to drying step (col. 2, L 50-59). Ness teaches products comprising the particles such as hair care, fabric conditioning and cleaning compositions, with the

microparticles comprising up to 10% of the product (col. 3, l 1- 10). The particles of Ness have an average particle size of 10 microns up to 125 microns, depending on the use 9col. 3, L 28-53). Ness teaches that the particles are made of polymers containing vinyl monomers such as esters of acrylic acid or alkyl acrylic acid and the preparation of the same described in col. 4. In order to encapsulate the perfume, Ness teaches employing a hydroxy functional polymer and urea-formaldehyde or melamine-formaldehyde together with acrylate polymer to form the microcapsules and absorbing the perfume within the core, which meets the polymer of instant claim 3. While Ness does not teach the ratio of the acrylamide-acrylic acid and melamine-formaldehyde-pre-condensate to acrylamide –acrylic acid copolymer claimed (claims 19-22) Ness does recognize that crosslinking the polymer with the claimed formaldehyde is one of the methods of preparing the perfume containing particles and accordingly, in the absence of any unexpected advantage with the claimed ratios of acrylamide-acrylic acid and melamine-formaldehyde-pre-condensate to acrylamide –acrylic acid copolymer claimed, it would have been within the scope of a skilled artisan at the time of the instant invention was made to choose the appropriate amounts of the acrylic or acrylamide monomers and the formaldehyde component. Ness teaches numerous perfume compounds that may be absorbed or encapsulated by the particles in col. 7-8 and the suitable solvents for perfumes include ethanol, isopropanol, etc. Ness teaches that the perfume containing particles are used in fabric conditioners and also personal care compositions such as soaps, hair and skin care compositions, including shampoos or shower gels (col. 13-14), which may additionally contain 2 to 40% weight of detergents

or surfactants, cationic polymer such as silicones. Examples 14 and 17 of Ness are directed to hair care and personal care products and contain various cosmetic carriers and/or additives that meet the claimed buffering agents, gel base etc.

Midha teaches hair conditioning particles comprising hair care and hair cosmetic components such as surfactants, fatty alcohols, cationic polymers, etc. The particles of Midha are both solid and also hollow (see 0056-0074, with the particle sizes that are within the claimed range. Midha teaches that the compositions are preferably in the range of 2.5 to 7.0 (0090), which is within the range of claims 12 and 13. Further, Midha teaches including additional hair cosmetic ingredients such as thickening and suspending agents such as xanthan gum, guar gum et c., (0175 and examples), which are also claimed in the instant claims.

It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to employ the acrylic-acrylamide polymer with melamine-formaldehyde or urea-formaldehyde as the material to encapsulate a desired perfume and employ the perfume containing particles for hair care application or body care applications in addition as fabric softeners because Ness teaches that the above polymer allows enhanced imbibing of the liquid into the particles, enhanced deposition of perfume with retarded evaporation of the perfume. Thus, a skilled artisan would have been able to employ the perfume containing microcapsules of Michael for hair as well as fabric softener applications with an expectation to improve perfume deposition and high retention of the perfume without evaporation.

Alternatively, Ness fails to teach the wide range of microcapsule diameter and thickness of the instant claims. However, Michael, discussed above, teaches the same. Therefore it would have been obvious for one of an ordinary skill in the art at the time of the instant invention was made to prepare the particles of Ness with the thickness and diameter suggested by Michael and yet provide the desired release rate and retention of perfume. It would have been further obvious for a skilled artisan at the time of the instant invention was made to adjust the pH of the composition of Ness or Michael between 2 and 7 and include any of the hair cosmetic and hair care additives such as suspending agents, thickening agents suggested by Midha in the composition of Ness or Michael so as to achieve a composition with the desired pH and viscosity.

### ***Response to Arguments***

2. Applicant's arguments filed 7-24-08 have been fully considered but they are not persuasive.
3. Applicants argue as follows:
4. Ness nowhere provides any teaching, suggestion or motivation of a wash off product comprising a liquid fragrance material encapsulated by a polymer to provide a polymer encapsulated fragrance wherein the encapsulated fragrance is further coated by a cationic polymer and additional comprising a silicone material. In contrast to the present invention, Ness et al. clearly discloses at col. 3 lines 47-49, "this invention uses polymer particles which are solid-although they may be porous as well as solid- rather than particles in the form of hollow capsules". Ness et al. teach that solid particles are

advantageous over hollow capsules and the polymerization reaction can be carried out in the absence of the liquid. Obviousness of a composition or process must be predicated on something more than it would be obvious to try the particular component recited in the claims or the possibility it will be considered in the future, having been neglected in the past. *Exparte Argabright et al.* (POBA 1967) 161 U.S.P.Q. 703.

Furthermore, although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992). There is no teaching, motivation or suggestion in *Ness et al.* to modify the solid particles disclosed therein and arrive at the claimed invention. Moreover, *Ness et al.* teaches away from the claimed invention by teaching solid particles are superior to hollow capsules. There is no teaching, suggestion or motivation in *Ness et al.* that replacing the solid particle materials with the capsule materials presently claimed in the invention would have the same result without the use of undue experimentation.

5. Applicants' arguments are not persuasive because *Ness* has been cited not for filling the capsules with fragrance (which is taught by *Michael*) and instead is only cited for to employ the acrylic-acrylamide polymer with melamine-formaldehyde or urea-formaldehyde as the material to encapsulate a desired perfume and employ the perfume containing particles for hair care application or body care applications in addition as fabric softeners because *Ness* teaches that the above polymer allows enhanced imbibing of the liquid into the particles, enhanced deposition of perfume with

retarded evaporation of the perfume. With respect to the argument regarding the solid and hollow particles, Ness does not teach that one should not use hollow particles and instead only states that the solid particles are advantageous to achieve the desired size ranges and also perform polymerization in the absence of liquid, which does not mean that one cannot use hollow particles. The above teaching of Ness implies that with respect to the hollow particles adjusting the size range is not easy and also that polymerization should be carried out in the presence of a liquid. On the other hand, Ness also describes encapsulated particles (see col. 6, L 53-57) for encapsulated liquid perfume. This teaching of Ness does not constitute a teaching away from hollow particles.

6. Applicants argue:

7. Examiner further cites Midha for the disclosure hair care particles that contain suspending agents and thickening agents. None of the references teach or suggest a technique for highly substantive deposition of effectively-rupturable malodour suppressant and/or fragrance emitting microcapsules onto specific regions of the human epidermis or onto groups of human hair follicles wherein the resulting emitted fragrance activity and/or malodour counteractant activity is continuously intense and long-lasting and where the resulting substantive aroma is aesthetically pleasing over the long period of time during which it is effective as the claimed invention. Thus, one skilled in the art would not be motivated to modify the capsules of Michael with the solid particles of Ness et al. or Midha to arrive at the presently claimed invention with any expectation of success. Therefore, in view of the amendment to Claim 1-13 and 17-25,

are not obvious under 35 U.S.C. § 103(a) over Michael, Ness and Midha and are therefore patentable.

8. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, the above combinations of references teach all of the claimed limitations and hence the rejection has been maintained.

#### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila G. Landau can be reached on 571-272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lakshmi S Channavajjala/  
Primary Examiner, Art Unit 1611  
November 10, 2008